

Command= 210-

Point#, Start#-End# or G#= 1-1508

Bearing	Distance	Elev	Descrip	Pnt.	Northing	Easting	Type
-----01-09-2024-----16:55:26-----D:...\BMHOME3							
			sethub	500	5306.4732	6812.3728	INT
			sethub	501	5306.5863	6812.1680	INT
	53.10		sethub	502	5306.5307	6812.2687	TRA
	48.37		pole	503	5450.0586	6843.0902	SS
	48.42		12"maple	504	5416.7227	6841.2519	SS
	49.32		setnl***	505	5401.9299	6833.2538	SS
	48.61		elec*	506	5419.5301	6836.7925	SS
	49.56		elec*	507	5402.3850	6823.0610	SS
	50.71		elec*	508	5378.2405	6807.0432	SS
	50.84		elec*	509	5367.7782	6828.8411	SS
	49.78		@meters	510	5385.0556	6820.9191	SS
	51.36		cordeck	511	5348.9497	6811.9861	SS
	51.72		corsteps	512	5335.9792	6810.2153	SS
	54.56		deck***	513	5341.8095	6799.0329	SS
	52.26		cormh	514	5319.4694	6804.8595	SS
	52.77		cormh	515	5305.6440	6802.8905	SS
	53.24		cormh	516	5296.7249	6792.2069	SS
	53.59		epclldr	517	5280.3912	6769.1186	SS
	55.37		eprd	518	5255.3151	6794.1683	SS
	54.71		shed	519	5279.5120	6803.6501	SS
	54.59		shed	520	5286.5902	6806.1436	SS
	55.27		shed	521	5283.5762	6815.4220	SS
	54.30		setnl5pn	522	5298.2734	6821.8520	SS
	55.46		shed	523	5282.0317	6827.7677	SS
	55.51		shed	524	5278.8123	6835.1775	SS
	55.32		gnd	525	5285.3000	6862.7564	SS
	52.41		shed	526	5317.2064	6833.8974	SS
	52.02		shed	527	5317.8529	6841.5671	SS
	50.96		bs	528	5334.7937	6889.6593	SS
	53.82		ts	529	5333.9716	6895.2913	SS
	53.30		ts	530	5323.3825	6883.0605	SS
	50.95		bs	531	5328.4450	6877.1476	SS
	51.29		bs	532	5318.0796	6863.8312	SS
	51.88		cllinepl	533	5326.4206	6812.3030	SS
	51.03		birch	534	5351.9603	6817.5878	SS
	51.12		cormh	535	5360.8361	6842.1632	SS
	50.96		gnd	536	5346.0607	6827.1262	SS
	52.21		gnd	537	5323.6099	6826.7467	SS
	49.02		ep	538	5412.7463	6816.0861	SS
	50.03		ep	539	5390.8275	6789.2874	SS
	51.03		ep	540	5359.5651	6763.1779	SS
	51.65		corepdr	541	5352.7535	6734.3288	SS
	52.52		cormh	542	5360.6346	6697.2229	SS
	49.06		epdr**	543	5405.8142	6856.1812	SS
	50.50		epwlk4'	544	5383.4883	6850.3145	SS
	51.07		clstps	545	5370.5798	6853.6126	SS

JOB #17 480bley [1508]

Bearing	Distance	Elev	Descrip	Pnt.	Northing	Easting	Type
-----	-----	-----	-----	-----	-----	-----	-----
	01-09-2024			16:55:26			D:... \BMHOME3
	53.87	@door**	546	5363.6347	6855.3569		SS
	49.63	corep	547	5397.3591	6858.5149		SS
	49.60	corep	548	5392.7314	6871.9504		SS
	50.47	bsts	549	5369.5624	6907.6981		SS
	52.39	cormh	550	5326.9499	6925.8975		SS
	50.10	corepdr	551	5379.6589	6921.5048		SS
	49.47	corepdr	552	5396.5566	6930.2470		SS
	49.01	corepdr	553	5411.9331	6910.7089		SS
	49.72	gnd	554	5384.0807	6896.0987		SS
	50.51	corfnc**	555	5364.6351	6888.5285		SS
	51.35	toprisr	556	5384.4453	6874.0071		SS
	51.50	toprisr	557	5381.7940	6868.9337		SS
		d27066	900	5574.4814	7059.5793		TRA
		calip?	901	5541.1084	6961.2483		TRA
	48.01	2hub	902	5502.6623	6735.9791		TRA
	48.48	setpk	903	5425.0393	6852.1168		SS
	53.41	fndipbas	904	5540.8115	6963.3512		TRA
	45.31	edgwet	905	5554.3189	6742.1173		SS
	45.59	ts	906	5528.0313	6726.3642		SS
	44.76	edgwet	907	5530.5793	6724.8328		SS
	46.11	ts	908	5508.1825	6722.5926		SS
	45.24	edgwet	909	5509.0141	6719.3189		SS
	45.47	ts	910	5489.7032	6703.3267		SS
	44.98	edgwet	911	5489.3826	6701.5837		SS
	45.31	edgwet**	912	5463.0656	6686.6057		SS
	50.58	corshed*	913	5435.4890	6711.5133		SS
	49.97	corshed*	914	5450.3936	6725.8032		SS
	49.84	corshed*	915	5440.1894	6732.1519		SS
	49.83	cormh	916	5428.6463	6731.2016		SS
	52.51	cor#10	917	5419.3753	6721.3036		SS
	49.28	corplout	918	5463.0226	6766.4536		SS
	48.82	@tank	919	5457.1904	6755.8898		SS
	49.78	ts	920	5463.4483	6734.5487		SS
	49.43	ts	921	5476.9789	6748.3327		SS
	48.33	gnd	922	5481.6600	6774.6090		SS
	49.20	cormh	923	5468.1430	6784.5772		SS
	47.91	clendstp	924	5515.0331	6813.9640		SS
	48.15	rlcor#8	925	5529.1326	6823.2636		SS
	47.33	gnd	926	5519.0693	6780.9283		SS
	48.65	bmpkroot	927	5467.4015	6714.7852		SS
	48.04	pole#324	928	5450.4174	6843.3491		SS
	48.37	elec	929	5448.6349	6812.2572		SS
	49.26	cormh	930	5457.2019	6793.0564		SS
	47.71	cor#8	931	5472.4690	6815.7290		SS
	48.07	cor#8	932	5468.7723	6842.9666		SS
	49.02	h20s/o	933	5436.4233	6799.1872		SS
	52.43	flel	934	5446.9944	6780.2454		SS
	49.46	cormh	935	5436.3665	6785.9798		SS
	49.50	cormh	936	5423.0487	6768.0404		SS
	49.47	bsconc**	937	5414.6865	6736.6701		SS
	52.46	bmcor***	938	5402.0149	6738.2921		SS
	50.98	h20gt**	939	5362.8535	6762.0367		SS
	51.39	epepdr	940	5367.7797	6750.2004		SS
	50.72	ep	941	5387.6021	6766.1115		SS
	49.79	ep	942	5412.3606	6787.2645		SS
	49.35	ep@dr	943	5424.3368	6801.0616		SS
	49.07	ep@dr	944	5431.1501	6811.7467		SS
	48.45	ep	945	5436.1176	6826.2057		SS

JOB #17 480bley [1508]

Bearing	Distance	Elev	Descrip	Pnt.	Northing	Easting	Type
-----01-09-2024-----16:55:26-----D:...\BMHOME3							
		48.45	ep@epdr	946	5439.1172	6845.4657	SS
		46.89	top12cul	947	5443.4314	6878.9241	SS
		47.17	top12cul	948	5413.5443	6852.8754	SS
		48.61	bmblowof	949	5419.5197	6848.5164	SS
		49.09	wmain**	950	5418.2134	6817.4830	SS
		49.69	gnd	951	5416.6414	6768.8291	SS
		51.49	cor#40	952	5356.3123	6800.8699	SS
		51.16	cor#41	953	5360.7942	6842.2389	SS
		50.74	cor#41	954	5367.7953	6882.3771	SS
		48.70	ep@epdr	955	5411.2322	6878.1976	SS
		48.44	ep@epdr	956	5418.8654	6860.7702	SS
		51.07	clwkclst	957	5370.6244	6854.0732	SS
		51.93	corshed*	958	5329.0897	6833.0277	SS
		51.37	cordck40	959	5349.0058	6811.9736	SS
		52.32	corplout	960	5319.4774	6804.8522	SS
		49.96	elec	961	5385.7274	6820.7213	SS
			SYS	962	5293.8842	6160.7790	
			12B	963	5391.7571	6178.9561	
			12A	964	5318.2547	6084.1015	
			12A	965	5296.1220	6101.2520	
			12B	966	5369.6244	6196.1067	
			12B	967	5369.7064	6150.4997	
			12A	968	5340.3054	6112.5579	
			12A	969	5329.2391	6121.1331	
			12B	970	5358.6400	6159.0750	
			12B	971	5347.5736	6167.6503	
			12A	972	5318.1727	6129.7084	
			SYS	973	5306.9308	6151.9619	
			SYS	974	5331.5881	6188.3608	
			SYS	975	5318.4388	6197.3038	
				976	5399.9444	6183.1550	INT
				977	5373.2326	6155.0502	INT

Point#, Start#-End# or G#= 4-



# APPROVAL FOR CONSTRUCTION

N.H. DEPARTMENT OF ENVIRONMENTAL SERVICES  
SUBSURFACE SYSTEMS BUREAU  
CA2006080846 P.O. BOX 95, 29 HAZEN DRIVE, CONCORD, NH 03302-0095 APPROVAL NO. CA2006080846

THE PLANS AND SPECIFICATIONS FOR SEWAGE OR WASTE DISPOSAL SYSTEM SUBMITTED FOR:

OWNER:  
RICHARD/RUTH BLEY  
83 HEMLOCK HAVEN  
HAMPTON NH 03842

Map No./Lot No.: 138 / 1-40  
Subd. Appvl. No.: 13391  
Subd. Name: HEMLOCK HAVEN  
County: ROCKINGHAM  
Registry Book No.: 3537  
Registry Page No.: 1361  
Probate Docket No.:  
(If Applicable)

COPY SENT TO:

BUILDING INSPECTOR  
136 WINNACUNNET RD  
HAMPTON NH 03842

Type of System: BR 600 GPD  
Town/City Location: HAMPTON

Street Location: 40/41 HEMLOCK HAVEN

Subsurface waste disposal systems must be operated and maintained in a manner so as to prevent nuisance or health hazard due to system failure.

(RSA 485-A:37)

It is unlawful to discharge any hazardous chemicals or substances into subsurface waste disposal systems. Included are paints, thinners, gasoline and chlorinated hydrocarbon solvents such as TCE, sometimes used to clean failed septic systems and auto parts. (Env-Ws 1503.04)

BY APPLICANT: PERMIT NO.

00348

STOCKTON SERVICES  
PO BOX 1306  
HAMPTON NH 03843-1306

ADVISE YOUR CONTRACTOR OF REQUIRED CHANGES  
IN PLANS AS INDICATED BELOW CONDITIONS

1. THIS APPROVAL IS VALID FOR 90 DAYS FROM DATE OF SAID APPROVAL, PER ENV-Ws 1003.19.
2. THIS APPROVAL IS GRANTED ONLY TO IMPROVE AN EXISTING SITUATION.
3. APPROVED WITH A COMMUNITY WATER SUPPLY ONLY.
4. WAIVERS GRANTED.

Approved this date: 05/24/2006 By: ERIC J THOMAS  
Date amended: Amended by: N.H. Department of Environmental Services Staff  
(OVER)

REVISED 8/01

200603335

APPLICANT'S

PERCOLATION RATE ESTIMATED 5 MIN/IN @ 24" DEPTH  
5/12/06

TWO EXISTING 2 BEDROOM MOBILE HOMES  
FOR TOTAL 4 BEDROOMS (600 GPD)

DESIGN LOADING:

PER CLEAN SOLUTION SPECIFICATIONS:  
200 SF DISPERSAL AREA REQUIRED

AREA REQUIRED:

10' X 30' = 300 SF PROVIDED  
(DISPERSAL AREA)

REVIEWED AND APPROVED  
IN ACCORDANCE WITH THE  
REQUIREMENTS OF THE  
NH DEPT OF ENVIRONMENTAL SERVICES  
WATER DIVISION

Signed

Date

ADVISE YOUR CONTRACTOR  
OF REQUIRED CHANGES IN  
PLANS AS INDICATED ON THIS  
CONDITIONAL APPROVAL.

## PROPOSED REPLACEMENT SEPTIC SYSTEM PLAN

EXISTING FAILED SYSTEM (#41)

LOCUS: #40 AND #41 HEMLOCK HAVEN  
HAMPTON, NH

OWNER: RICHARD AND RUTH BLEY  
83 HEMLOCK HAVEN  
HAMPTON, NH 03842

APPLICANT:  
STOCKTON SERVICES  
PO BOX 1306  
HAMPTON, NH 03842

DATE: MAY 15, 2006

APPROVAL:

480

RECEIVED  
MAY 23 2006  
By

NEW HAMPSHIRE  
Designer  
of  
Subsurface Disposal  
Systems  
Ann W. Bialobrzeski  
No. 348  
Water Supply & Pollution Control



APPROVAL FOR CONSTRUCTION

CA2007086506 N.H. DEPARTMENT OF ENVIRONMENTAL SERVICES SUBSURFACE SYSTEMS BUREAU P.O. BOX 95, 29 HAZEN DRIVE, CONCORD, NH 03302-0095 APPROVAL NO. CA2007086506

THE PLANS AND SPECIFICATIONS FOR SEWAGE OR WASTE DISPOSAL SYSTEM SUBMITTED FOR: 30A34R28U8

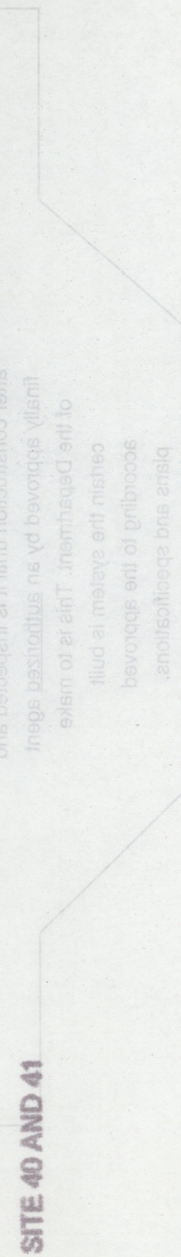
OWNER: RICHARD/RUTH BLEY 83 HEMLOCK HAVEN HAMPTON NH 03842  
Map No./Lot No.: 138 / 1-40 13391  
Subd. Appvl. No.: HEMLOCK HAVEN  
Subd. Name: ROCKINGHAM  
County: JAVORRA  
Registry Book No.: 3537  
Registry Page No.: 1361  
Probate Docket No.:  
(If Applicable)

COPY SENT TO:  
BUILDING INSPECTOR 136 WINNACUNNET RD HAMPTON NH 03842  
Type of System: 600 GPD  
Town/City Location: HAMPTON 40/41 HEMLOCK HAVEN

BY APPLICANT: PERMIT NO. 000348  
STOCKTON SERVICES PO BOX 1306 HAMPTON NH 03843-1306  
Street Location: Subsurface waste disposal systems must be operated and maintained in a manner so as to prevent nuisance or health hazard due to system failure, (RSA 485-A:37)  
It is unlawful to discharge any hazardous chemicals or substances into subsurface waste disposal systems. Included are paints, thinners, gasoline and chlorinated hydrocarbon solvents such as TCE, sometimes used to clean failed septic systems and auto parts. (Env-Ws 1503.04)

ADVISE YOUR CONTRACTOR OF REQUIRED CHANGES IN PLANS AS INDICATED BELOW CONDITIONS

- 1. THIS APPROVAL IS VALID FOR 90 DAYS FROM DATE OF SAID APPROVAL, PER ENV-WS 1003.19.
- 2. THIS APPROVAL IS GRANTED ONLY TO IMPROVE AN EXISTING SITUATION.
- 3. APPROVED WITH A COMMUNITY WATER SUPPLY ONLY.
- 4. APPROVAL FOR TWO, (2) BEDROOM MOBILE HOMES.
- 5. WAIVERS GRANTED.



APPROVED THIS DATE: 03/02/2007  
Date amended: 03/02/2007  
By: ERIC J THOMAS  
N.H. Department of Environmental Services Staff  
Amended by: (OVER)

PERCOLATION RATE ESTIMATED 5 MIN/IN @ 24"DEPTH 5/12/06  
DESIGN LOADING: TWO EXISTING 2 BEDROOM MOBILE HOMES FOR TOTAL 4 BEDROOMS (600 GPD)  
AREA REQUIRED: PER CLEAN SOLUTION SPECIFICATIONS: 200 SF DISPERSAL AREA REQUIRED

AREA PROPOSED: 10' X 30' = 300 SF PROVIDED (DISPERSAL AREA)

RECEIVED  
ADVISE YOUR CONTRACTOR OF REQUIRED CHANGES IN PLANS AS INDICATED ON THIS CONDITIONAL APPROVAL.  
FEB 28 2007  
By Subsurface

REVIEWED AND APPROVED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NH DEPT OF ENVIRONMENTAL SERVICES WATER DIVISION  
Eric J Thomas  
3-2-07

PROPOSED REPLACEMENT SEPTIC SYSTEM PLAN

EXISTING FAILED SYSTEM (#41)

LOCUS: #40 AND #41 HEMLOCK HAVEN HAMPTON, NH

OWNER: RICHARD AND RUTH BLEY  
83 HEMLOCK HAVEN  
HAMPTON, NH 03842

APPLICANT: STOCKTON SERVICES PO BOX 1306 HAMPTON, NH 03842  
AMENDED 2/25/07 NEW TANK #40  
DATE: MAY 15, 2006  
APPROVAL: CA2006080846

NEW HAMPSHIRE Designer of Subsurface Disposal Systems \*\*\* Ann W. Blatobrzeski No. 348. Water Supply & Pollution Control

NO SHALL  
LE ODORS OCCUR.





# WASTEWATER ALTERNATIVES, INC.

37 Champney St. Groton, MA 01450

Telephone: (978) 448-2415

Toll Free: (866) 900-2415

Fax: (978) 448-2911

<http://www.thecleansolution.com>

email: [harold@thecleansolution.com](mailto:harold@thecleansolution.com)

May 21, 2006

Richard and Ruth Bley  
83 Hemlock Haven  
Hampton, NH 03842

Dear Richard and Ruth Bley,

Thank you for choosing to use THE CLEAN SOLUTION™ alternative septic system for Lots 40 & 41 on Alison Circle in Hampton, NH. Attached is a sales agreement for the system. This agreement describes what you are buying, the required maintenance, your warranty, the price and the terms of sale.

There are three copies:

1. The complete copy is for your records.
2. Anne Bialobrzewski of STOCKTON SERVICES will send one signed white copy to NHDES with your subsurface disposal plan submittal. They need this for their records so that they know that you are aware of the required maintenance.
3. Please sign the second white copy and return it to me with the initial payment about three weeks before the actual installation. I would also like to know the name of your installer at this time so that I can coordinate with him.

I look forward to working with you. Please give me a call if you would like to discuss the system or the sales agreement.

Sincerely,

*Harold E Davis*

Harold E. Davis



# WASTEWATER ALTERNATIVES, INC.

37 Champney St. Groton, MA 01450

Telephone: (978) 448-2415

Fax: (978) 448-2911

## SALES AGREEMENT

May 21, 2006

### BUYER:

Richard and Ruth Bley  
83 Hemlock Haven  
Hampton, NH 03842

### SITE:

TAX MAP 138, LOT 1-9  
Lots 40 & 41  
Alison Circle  
Hampton, NH

### SELLER:

Wastewater Alternatives, Inc.  
37 Champney St.  
Groton, MA 01450

Wastewater Alternatives, Inc. (WAI) agrees to supply a **Model 250ST3M CLEAN SOLUTION™** Sewage Treatment System to the buyer installed at the above site in accordance with the attached specifications and the subsurface disposal plan submitted by Stockton Services, as approved by NHDES. The buyer is responsible for retaining the licensed designer, obtaining the approved plan, and hiring a qualified installer. This sale is subject to two important conditions:

- 1. Should the above property be sold, this agreement should be transferred to the new buyer and will become binding on both the seller and the new owner[s].**
- 2. This agreement contains a maintenance schedule. Failure to perform this maintenance could result in premature failure of the dispersal field. In this event it will be the owners responsibility to repair the field.**

WAI will provide and install as shown in the accompanying sketch and specifications:

1. A 2000 gal 3-compartment, standard duty A.J. Foss Inc., concrete tank to function as a septic tank, aerobic treatment tank and a settling tank.
2. 40 cu ft of plastic media (Increased media over standard 250ST3 System)
3. A 3.0 scfm compressor
4. All necessary internal components
5. An installed .5hp Sta-Rite EC440 sump pump with necessary controls and alarms. The pump will be wired into the house by a licensed electrician subject to the conditions listed below.
6. The price does not include excavation to install the components of this system, dispersal field, or connections from the house to THE CLEAN SOLUTION™ to the dispersal field or a sump pump.

WAI will provide wiring for the sump pump up to 50' from the system to the alarm panel and to a 20amp empty circuit breaker in the existing house service. Additional wiring will be billed at direct costs.

Placement of the compressor will be mutually determined by the owner and WAI. A 115 volt outlet capable of supplying 1 amp [about the equivalent of a 100 watt light bulb] continuously will be required near the compressor. Should an external housing be required to protect the compressor, it will also be billed at direct costs. Additional wiring or wiring required to address local or state electrical code issues will be billed at direct costs.

Should a drive-on installation be required, the additional costs for H-20 tanks and steel man hole covers will be billed at direct costs.

THE CLEAN SOLUTION™

*An Alternative Septic System*





# WASTEWATER ALTERNATIVES, INC.

37 Champney St. Groton, MA 01450

## MAINTENANCE

The following maintenance is required every 2 1/2 years:

1. Pump out both the settling and septic tanks
2. Rebuild compressor
3. Inspect and take corrective action, if necessary:
  - a] media if plugged, backwash with air
  - b] sludge in BioCon pump BioCon tank if excessive
  - c] diffuser replace if pressure drop too great

A maintenance agreement is available for performing items 2 and 3 from PUMP SYSTEMS INC. POB 6101, WEST FRANKLIN, NH 03235, TEL# 603-934-7100. You can obtain a sample agreement by contacting them directly. Their service will include a detailed inspection of your system, replacement of any failed items and either a new rebuilt compressor or an on site rebuild of yours [their option]. Tank pumping is not included in the price and must be arranged by you just prior to the scheduled maintenance appointment.

Based on the inspection findings at the first scheduled maintenance, the maintenance schedule may be modified by mutual consent and any changes will be reduced to writing. In the absence of a written modified maintenance schedule, the above schedule must continue to be performed by the buyer.

For a period of 2 years, WAI will warrant the system and repair any malfunction, including parts and labor, at no cost to you. Your responsibility during this period is to perform the required maintenance and to notify WAI of any failure. Failure to perform either of these items will void this warranty and result in you being billed for repair costs. This warranty also does not cover damage caused by unreasonable use or acts of God.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY OR OTHERWISE, APPLICABLE TO THE SEWAGE TREATMENT SYSTEM SHALL BE LIMITED IN DURATION TO ONE YEAR.

WASTEWATER ALTERNATIVES SHALL NOT BE LIABLE FOR ANY DIRECT OR INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. NOR, SHALL WASTEWATER ALTERNATIVE'S LIABILITY UNDER THIS WARRANTY EXCEED THE PRICE PAID BY THE BUYER.

## PERFORMANCE SPECIFICATIONS:

The system is warranted to discharge clean, odor free water to the dispersal field, equivalent or better than that obtained from a municipal system with secondary treatment (30ppm BOD5, 30ppm SS).





# WASTEWATER ALTERNATIVES, INC.

37 Champney St. Groton, MA 01450

## PAYMENT

The agreed upon price for the WAI equipment and services detailed in this agreement is \$7,700.00.

Payment is requested as follows:

\$3,900.00 upon signing this agreement

\$3,800.00 immediately upon state inspection or start-up; whichever occurs later.

Ownership will transfer to the buyer upon final payment.

THIS PRICE IS VALID FOR 60 DAYS FROM THE DATE OF THIS DOCUMENT.

## DELIVERY

WAI will be prepared to install the system about 3 weeks after you have chosen an installer and returned a signed copy of this agreement, along with the initial payment, to me. It is important that I be able to coordinate with the installer, so I should be notified of his name and telephone number.

## RIGHTS TO DATA AND ACCESS TO THE SYSTEM

WAI reserves the right of reasonable access to collect data, modify, maintain and repair THE CLEAN SOLUTION and its subsystems. WAI will retain all data collected and the rights to it.

## TRADE SECRETS

THE CLEAN SOLUTION is the result of the expenditure of much effort and money. The design of the components and operational cycle are the intellectual property of WAI and may not be revealed without written permission.

## ACCEPTED:

BUYER:

SELLER:

*Harold E Davis*

Wastewater Alternatives, Inc.  
Harold E. Davis, President

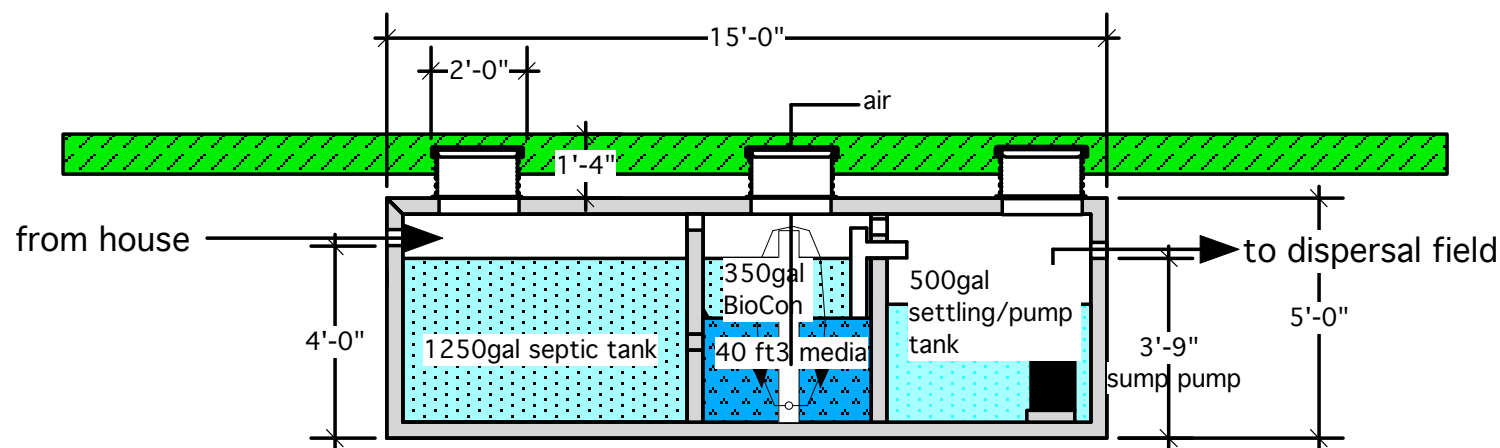
Date:

Date: May 21, 2006



# MODEL 250ST3 CLEAN SOLUTION SYSTEM

for  
RICHARD AND RUTH BLEY  
LOTS 40 & 41-ALISON CIRCLE  
HAMPTON, NH



A J Foss standard duty, 3 compartment tank - 15'x6'6"wx5'h

Tank from:  
A. J. Foss Inc.  
Farmington, NH 03835  
Tel# 603-755-2515

Notes:  
Tank is standard duty and not suitable for drive on use  
Sump pump is a .4hp Sta-Rite EC 440  
Settling and pump tanks must be pumped out every 2.5 years  
Risers will be provided to suit site as necessary-Plastic preferred

TITLE

**Model 250ST3 Single Tank Clean Solution**

date 5/21/06

rev standard

**WASTEWATER ALTERNATIVES, INC.**



37 Champney St.  
Groton, MA 01450  
978-448-2415



## CLEAN SOLUTION™ SYSTEM SPECIFICATIONS

Model	Max daily flow per NHDES(1) gal/day	Max o2 req'd(3) #/day	Compressor rating - free flow scfm	Compressor flow @ 3.5' head scfm	Max o2 transferred @5% eff(4) #/day	Power consumption watts	Volume of plastic media in BioCon cu ft	Approx area of media in BioCon sq ft	Minimum dispersal field size sq ft
1,2, or 3 BEDROOM HOUSE									
250	450	1.00	3.0	2.5	2.7	80	30	900	75
	uses a 1000 gal 2 compartment cement tank								
250PT	450	1.00	3.0	2.5	2.7	80	30	900	75
	uses a 1050 gal 2 compartment plastic tank								
250ST3	450	1.00	3.0	2.5	2.7	80	30	900	75
includes septic tank	uses a uses a 3 compartment cement tank that includes a 1250 gal septic tank, a 350 gal BioCon and a 500 gal pump/settling tank								
4 BEDROOM HOUSE									
250	600	1.25	3.0	2.5	2.7	80	30	900	100
	uses a 1000 gal 2 compartment cement tank								
250PT	600	1.25	3.0	2.5	2.7	80	30	900	100
	uses a 1050 gal 2 compartment plastic tank								
250ST4	600	1.25	3.0	2.5	2.7	80	30	900	100
includes septic tank	uses a uses a 3 compartment cement tank that includes a 1600 gal septic tank, a 450 gal BioCon and a 500 gal pump/settling tank								
TYPICAL LARGE SYSTEM DESIGNS									
600	1200	2.00	3.0	2.5	2.7	80	35	1050	200
	uses a 1000 gal 2 compartment cement tank plus a 500 gal pump tank [if required]								
2000	5000	10.00	3@5.0	12.6	13.5	300	200	6000	700

### NOTES:

- [1] Models 250 & 250PT are identical for 3 & 4 bedroom homes except for the dispersal field size
- [2] Specifications for Models 500 and 2000 are only typical values. All models larger than Model 250 will be proposed on an individual basis - based on both flow and BOD. WAI has provided single systems capable of accommodating over 135 houses.
- (3) Assumes typical effluent from septic tank is 200ppm BOD.
- (4) Assumes that 5% of the O2 available in the air input is transferred into the water.



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## PRICES

Model	without sump pump	with sump pump (2)	comments
<b>250</b>	<b>\$4,900</b>	<b>\$5,900</b>	
<b>250PT</b>	<b>\$6,100</b>	<b>\$7,100</b>	<b>plastic tank</b>
<b>250ST3</b>	<b>\$6,300</b>	<b>\$7,300</b>	<b>integral septic tank</b>
<b>250ST4</b>	<b>\$6,700</b>	<b>\$7,700</b>	<b>integral septic tank</b>
<b>600 (1)</b>	<b>\$5,100</b>	<b>\$7,000</b>	<b>uses separate pump tank</b>
<b>2000 (1)</b>	<b>\$15,500</b>	<b>\$17,000</b>	<b>uses separate pump tank</b>

(1) These are typical prices for reference. Any system larger than a Model 250 is custom designed and priced.

(2) Prices include a standard sump pump - high head pumps for severe elevations are extra.

[3] Prices are subject to change without notice

[4] Prices are for standard duty tanks, heavy duty or H-20 tanks for drive on applications are extra.

### Prices include:

1. A BioCon aeration tank with plastic media, settling tank, tanks set in holes provided by the installer, all internal plumbing, and an installed air supply system,
2. If a sump pump is specified, an installed sump pump with necessary floats and alarms is provided. This includes wiring up to 50' to 2 empty circuit breakers in the existing house service. All wiring will be done by a NH licensed electrician.

### Prices do not include:

The services of a designer or installer, a septic tank [unless integral to the system], excavation, dispersal field, connections from the septic tank to THE CLEAN SOLUTION and to the dispersal field, additional wiring, and drive on installations.

## MAINTENANCE

**The following maintenance is required every 2 1/2 years:**

**1. Pump out both the settling and septic tanks**

**2. Rebuild compressor**

**3. Inspect and take corrective action, if necessary:**

- |                            |   |
|----------------------------|---|
| <b>a] media</b>            | <b>if plugged, backwash with air</b>      |
| <b>b] sludge in BioCon</b> | <b>pump BioCon tank if excessive</b>      |
| <b>c] diffuser</b>         | <b>replace if pressure drop too great</b> |

A maintenance agreement is available for performing items 2 and 3 from PUMP SYSTEMS INC. POB 6101, WEST FRANKLIN, NH 03235, TEL# 603-934-7100. You can obtain a sample agreement by contacting them directly. Their service will include a detailed inspection of your system, replacement of any failed items and either a new rebuilt compressor or an on site rebuild of yours [their option]. Tank pumping is not included in the price and must be arranged by you just prior to the scheduled maintenance appointment.

Based on the inspection findings at the first scheduled maintenance, the maintenance schedule may be modified by mutual consent and any changes will be reduced to writing. In the absence of a written modified maintenance schedule, the above schedule must continue to be performed by the buyer.

## COMPREHENSIVE WARRANTY

For a period of 2 years, WAI will warrant the system and repair any malfunction, including parts and labor, at no cost to you. Your responsibility during this period is to perform the required maintenance and to notify WAI of any failure.

**THE CLEAN SOLUTION™**

***An Alternative Septic System***





# **WASTEWATER ALTERNATIVES, INC.**

## **37 Champney St. Groton, MA 01450**

**Telephone: (978) 448-2415**

**Fax: (978) 448-2911**

### **THEORY of THE CLEAN SOLUTION**

Conventional small to mid- size sewage systems normally use a septic tank followed by a leach field to first provide anaerobic (without air) and then aerobic (with air) treatment of the effluent. Septic tanks work well for capturing and digesting the solids which are anaerobically fermented over a long period of time dissolving the solids into the liquid waste. However, a septic tank is not designed to treat the contaminants which dissolve in the liquids. These are treated aerobically in the leach field. Municipal systems, which handle very large volumes of wastes, use much different equipment to accomplish the same biological functions: primary sedimentation tanks remove solids, and a subsequent aerobic system treats the contaminants dissolved in the liquids. Settled solids are removed from municipal primary and secondary facilities for further treatment.

All aerobic treatment systems, whether a conventional leach field, a municipal treatment plant, or *THE CLEAN SOLUTION*, depend on bacteria to purify the effluent from a solids settling system. In order for bacteria to reproduce, they require energy (food) and air. By using the contaminants in the effluent as food and atmospheric air, the bacteria metabolize the dissolved solids to carbon dioxide, water and sludge (colonies of bacteria). The aerobic bacteria also convert ammonia compounds to nitrates.

A large number of bacteria need to come in contact with the food sources in order to purify an effluent. Treatment systems utilize different methods to provide the large necessary population. A municipal system mechanically stirs up the bacteria in the secondary treatment process so that they will contact their food and not settle out of the effluent. In a leach field, the sludge (biomat) that forms at the ground interface is a large colony of bacteria through which the dissolved solid stream flows. In the *THE CLEAN SOLUTION* the bacteria collect in a thin film on the plastic media in WAI'S proprietary *BioCon*<sup>™</sup> biological contactor, and the effluent is recirculated over them several times.

*THE CLEAN SOLUTION* uses the same biological process as a municipal secondary treatment plant using the activated sludge process. Solids are settled out, air is added for respiration for bacteria in the *BioCon*. This allows the bacteria to convert the carbonaceous dissolved solids to carbon dioxide, water and sludge and the urea and ammonia to nitrates and sludge. The sludge created is settled for periodic removal from the system, and a clean, odorless effluent is discharged to the dispersal field.

The major difference between a septic system and *THE CLEAN SOLUTION* is where the bacteria(sludge) collect. In a conventional system, the sludge forms in the bottom of the leach field and restricts the effluent flow enough so that the bacteria has time to act. This flow rate through the sludge determines the required field size. In *THE CLEAN SOLUTION*, the sludge is formed in the *BioCon*, and a clean effluent is discharged to the dispersal field. This field can be very small because there is no need for it to provide further treatment.

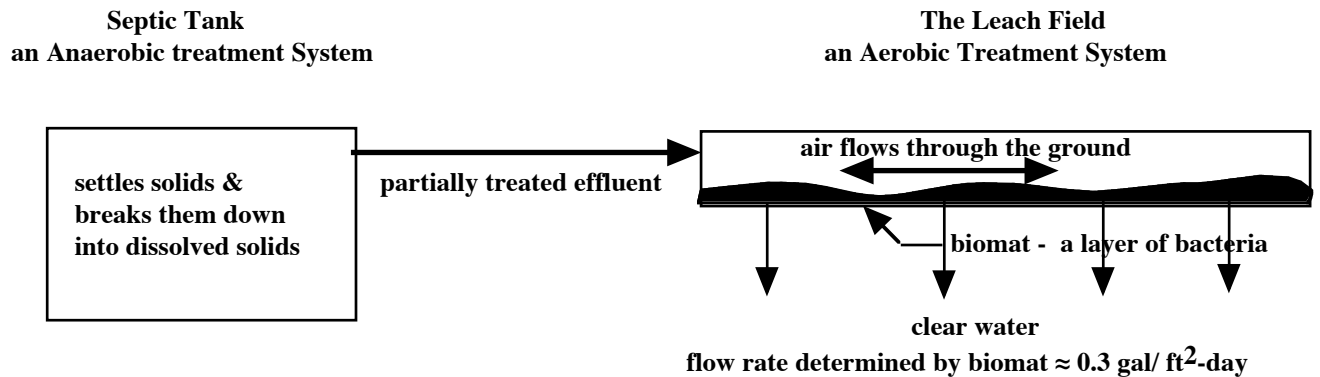


# WASTEWATER ALTERNATIVES, INC.

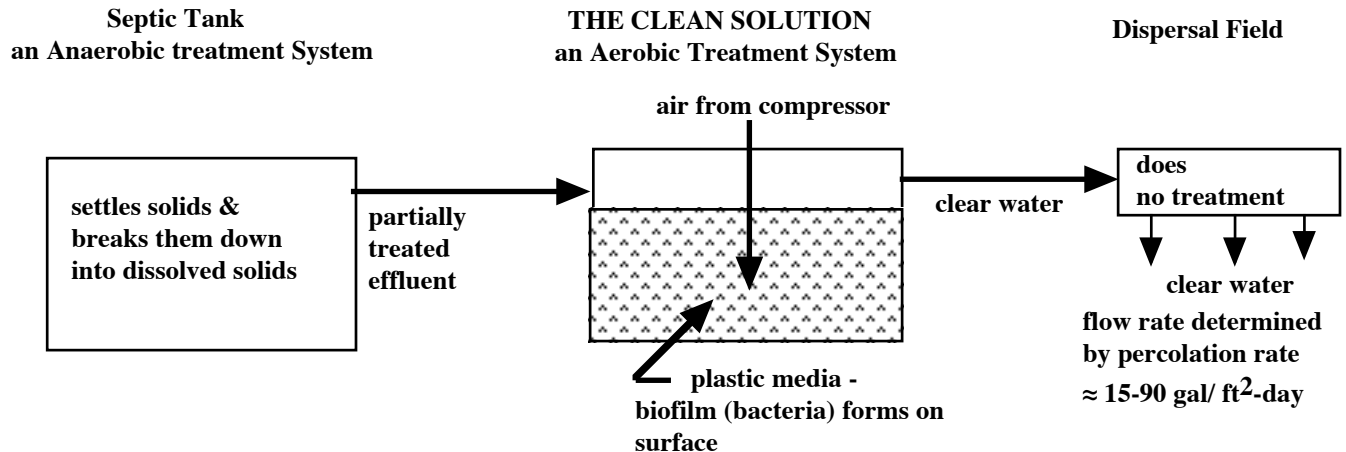
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## SIMPLIFIED OPERATIONAL SCHEMATIC OF IN-GROUND AEROBIC TREATMENT SYSTEMS

### Conventional System



### THE CLEAN SOLUTION System



In all aerobic treatment systems, bacteria does the cleansing of the effluent by using the carbon sources as food and air for oxidization thereby producing carbon dioxide, water and more bacteria. You see groups of this new bacteria as biomat or sludge. THE CLEAN SOLUTION™ performs exactly the same functions as the leach field - except it accomplishes them mechanically in a tank. The square footage of plastic media in THE CLEAN SOLUTION pretty much equals the square footage of a leach field for the same flow. Since THE CLEAN SOLUTION discharges clear water, just like the bottom of a leach field, the only purpose of the dispersal field is to disperse it into the ground for final pathogen removal.